



Kentucky Science & Technology Corporation



**Creating
opportunities
through science,
technology and
innovation**

KSTC
KENTUCKY SCIENCE & TECHNOLOGY
C O R P O R A T I O N

www.kstc.com



Kentucky Science and Technology Corporation

(KSTC) is a fast-paced leader in innovation with a reputation for developing and managing creative initiatives in:

- ♦ education,
- ♦ entrepreneurship, and
- ♦ scientific research.

Established in 1987, KSTC is governed by a Board of Directors comprised of leaders from business, education and policy arenas.

Mission

To improve the capacity of people, companies and organizations to develop and apply science and technology and compete responsibly in the global marketplace.

Strategies

Develop a comprehensive **innovation strategy** that brings together business, government and education as full partners to leverage economic opportunities for Kentucky's future.

Contribute to the creation of **entrepreneurial companies**, jobs and the international competitiveness of Kentucky's economy.

Promote **technology development and transfer** as well as an innovative mind-set conducive to entrepreneurial development.

Create a more systematic **approach to education** by which all levels (primary through university) contribute to Kentucky innovations.

Investments

Research & Development

- ♦ Kentucky Science and Engineering Foundation
<http://ksef.kstc.com>
- ♦ Kentucky Experimental Program to Stimulate Competitive Research (www.kyepscor.org)

Entrepreneurship

- ♦ Kentucky Enterprise Fund (www.startupkentucky.com)
- ♦ Innovation and Commercialization Centers (www.startupkentucky.com)

Education

- ♦ Appalachian Rural Systemic Initiative (www.arsi.org)
- ♦ EntreSchools® Initiative (www.entreschools.com)

Subsidiary

Intelligent Change Initiatives, Inc.

- ♦ International IdeaFestival™
www.ideafestival.com

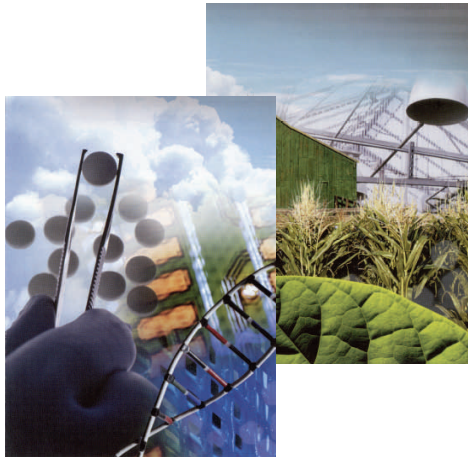
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KSTC

KENTUCKY SCIENCE & TECHNOLOGY
CORPORATION

Kentucky Enterprise Fund



Providing
seed and
early-stage capital
to innovative
Kentucky
companies

For information visit
www.startupkentucky.com



Kentucky Enterprise Fund

The Kentucky Enterprise Fund provides seed and early-stage capital to small and medium-sized Kentucky companies with high-growth potential.

By encouraging the commercialization of innovative ideas, the Kentucky Enterprise Fund fosters competitive, profitable companies that create high paying jobs and wealth in Kentucky.

Companies seeking capital go through a rigorous due diligence process and are judged in terms of industry fit, return on investment and economic development goals.

Investments are made in innovative companies:

- working in collaboration with Kentucky colleges or universities,
- in rural areas, or
- with a proof-of-concept commercialization project, or
- raising private capital.

Awards range from \$25,000 to \$400,000. Awards above \$25,000 require payback. Terms are structured like those of the private equity markets.

Companies in these industries are eligible for funding:

- Biosciences
- Environmental & Energy Technologies
- Human Health & Development
- Information Technology & Communications
- Materials Science & Advanced Manufacturing



The Kentucky Enterprise Fund identifies opportunities for strategic investment in companies in collaboration with:

- Innovation and Commercialization Centers*,
- Kentucky colleges and universities,
- Angel investors,
- Venture capital groups,
- Kentucky EPSCoR, and
- Kentucky Science & Engineering Foundation.

To apply for funding, visit:

www.startupkentucky.com

The Kentucky Enterprise Fund is an initiative of the Kentucky Science and Technology Corporation under contract with the Kentucky Council on Postsecondary Education.

*KSTC manages the Innovation and Commercialization Centers under a contract with the Kentucky Cabinet for Economic Development, Department of Commercialization and Innovation.

Research & Development Funding



**Providing
funding for
innovative R&D
with commercial
potential**

For information visit
www.kstc.com



Funding for R&D, Commercialization and SBIR/STTR Program

The Kentucky Science and Engineering Foundation (KSEF) builds science and engineering capacity by proactively investing in advanced and application oriented R&D through an international peer-review system to nurture, shape and strengthen innovative ideas into emerging products or technologies for commercialization.

The initial support through KSEF works as a spark to fuel the innovation, foster the interdisciplinary inter- or intra-institutional collaboration, and to venture in the areas that will make the scientists and engineers leaders. The catalytic effect will result in new products, new start-ups and growth of Kentucky companies, and in additional dollars from federal and private sources.

R&D Excellence Program:

Awards range from \$30,000 to \$100,000 for two-years in the following two categories:

- ♦ Emerging ideas (\$15-50K per year for up to 2 years; university faculty); and
- ♦ Emerging technologies (\$20-50K per year for up to 2 years; university faculty / small businesses).

Awards to universities are grants. However, awards above \$25,000 to businesses require a payback upon achieving some financial milestones.

Investments are made in five technology areas:

- ♦ Biosciences
- ♦ Environmental & Energy Technologies
- ♦ Human Health & Development
- ♦ Information Technology & Communications
- ♦ Materials Science and Advanced Manufacturing



Commercialization Fund:

The Commercialization Fund makes competitive awards up to \$75,000 per year to university faculty to commercialize the technologies developed through R&D. The awards may be renewed and may require a payback agreement with the universities.

SBIR/STTR Phase Zero and Double Zero Grants:

- ♦ Up to \$4,000 to help write a high quality competitive SBIR/STTR proposal.
- ♦ University faculty entrepreneurs and small businesses are eligible to apply.

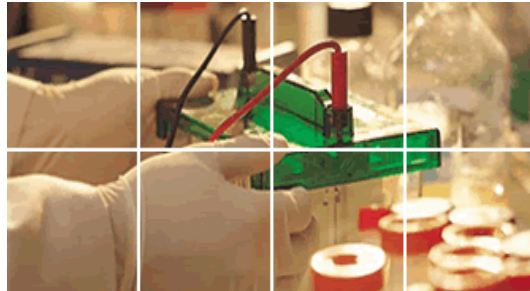


KENTUCKY SCIENCE &
ENGINEERING FOUNDATION

To apply for funding, visit
<http://ksef.kstc.com>

The Kentucky Science and Engineering Foundation is an initiative of Kentucky Science and Technology Corporation in collaboration with the Kentucky Council on Postsecondary Education

Kentucky
EPSCoR
Program



**Expanding
Science and
Technology
for
Kentucky's
Future**

Experimental Program to Stimulate Competitive Research



For information visit
www.kyepscor.org

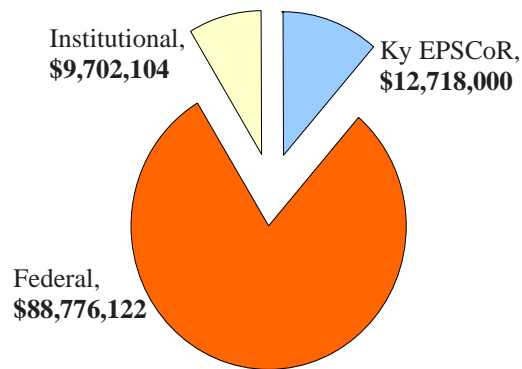




The Kentucky EPSCoR Program is expanding research talent in the science, engineering and mathematic disciplines at Kentucky's universities. In doing so, it is advancing the development of the Commonwealth's two major academic institutions (UK and UofL) as preeminent research-intensive universities and is enhancing the research capacity of the comprehensive universities (EKU, KSU, MoSU, MuSU, NKU and WKU).

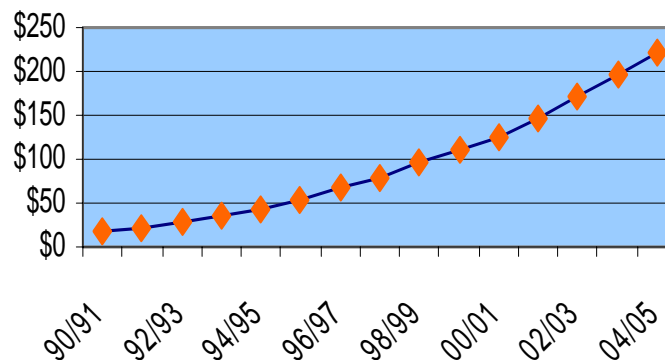
EPSCoR's Impact by the Numbers:

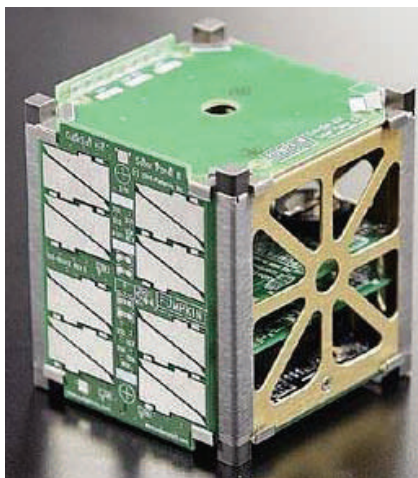
The pie-chart (below) reflects the seven-fold leveraging of Kentucky EPSCoR funds between 2001-2005 to channel \$88.7 million in Federal research dollars to Kentucky's universities.



Stimulating Competitive Research:

Kentucky has reaped over \$221 million in federal, state, university and private sector funding through leveraged EPSCoR Programs since Kentucky EPSCoR's inception. Total EPSCoR related funding is soon expected to exceed a quarter billion dollars.





Kentucky Satellites

- ♦ Student-Driven
- ♦ Design
- ♦ Launch
- ♦ Operations

- *KySat is a Pico class satellite measuring 10 cm x 10 cm x 10 cm in size, with a mass of no more than 1 kg.*
- *Payloads can include radios, cameras, science sensors and experiments.*
- *Solar cells on KySat convert sunlight into electricity, which powers the satellite and charges its batteries.*
- *The target altitude is between 600 and 800 km or 370 to 500 miles above the Earth's surface.*

www.kysat.com



KentuckySat™ (KySat) is a joint-enterprise involving public organizations, private companies, colleges and universities in the student-driven design, build, launch and on-orbit operations of small satellites for innovation and learning purposes.

KySat involves an ongoing series of projects, each with increasing scope and complexity. The KySat mission teams are comprised of Kentucky college students, with new team members selected every 12-18 months. KySat's first launch is projected for 2008.

Enterprise Strategies

The KentuckySat enterprise targets multiple strategies:

- ◆ **Satellite Development:**
The design, build, launch and on-orbit ground operations;
- ◆ **Talent Development:**
Science and engineering applications for college and high school students in an actual space/satellite operations environment;
- ◆ **Commercial Development:**
Pre-flight testing, satellite operations, and payloads.

Mission Partners

- ◆ NASA Ames Research Center
- ◆ Stanford University Space Systems Development Lab
- ◆ California Polytechnic State University (launch integrator)

Mission

To provide students with real-time learning in the dynamics of spacecraft design, construction, testing and on-orbit operations as means of extending science and technology education, R&D, and innovation.

Education Applications

After successfully reaching orbit, KySat will be made available statewide to schools (K-16), students, parents, ham operators, etc. for an array of educational purposes.

KySat Shareholders

as of March 2007

- ◆ University of Kentucky
- ◆ University of Louisville
- ◆ Morehead State University
- ◆ Murray State University
- ◆ Western Kentucky University
- ◆ Kentucky Community and Technical College System
- ◆ Kentucky Space Grant Consortium
- ◆ Kentucky Science and Engineering Foundation
- ◆ Kentucky Council on Postsecondary Education
- ◆ Kentucky Science and Technology Corporation (managing partner)

Virtual Network Partner
Kentucky Virtual Campus

KentuckySat™ is an initiative of the Kentucky Science and Technology Corporation (KSTC) through its Office for Advanced Concepts at NASA Ames in Mountain View, CA

KentuckySat contact information:
www.kysat.com / 859.233.3502 ext 223

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Small Business Innovation Research/ Small Business Technology Transfer Research—SBIR/STTR



Augmenting the Power and Potential of Small Businesses in Kentucky

For information visit
www.kstc.com



**Kentucky
offers the most
comprehensive
SBIR-STTR
assistance
program in the
Nation**

Kentucky SBIR/STTR Matching Funds Program

The program encourages growth of high-quality, advanced technology companies by increasing R&D intensity under Phase I to make Kentucky small businesses more competitive for Phase II funds, allowing continued technology and business development during Phase I and Phase II gap period, and advancing the prototype development and testing for early entry into the market place.

This program is funded by the Kentucky Cabinet for Economic Development (CED), Department of Commercialization and Innovation (DCI), and administered by KSTC under a contract.



Matching Fund Awards

- ◆ Phase I: Up to \$100,000 (for federal awards received on or after January 1, 2006)
- ◆ Phase II: Up to \$500,000 per year (for federal awards received on or after January 1, 2007)

Eligibility Requirements

- ◆ Awardee of SBIR/STTR Phase I or Phase II grant from the participating Federal agencies
- ◆ A Kentucky based company with 51% or more of property and payroll in Kentucky
- ◆ At least 51% of the grant effort to be performed in KY
- ◆ Company R&D must be in at least one of the following areas:
 - Biosciences
 - Environmental & Energy Technologies
 - Human Health & Development
 - Information Technology & Communications
 - Materials Science and Advanced Manufacturing

Application Submission Assistance Program (ASAP)

The application submission assistance program offers one-on-one counseling, SBIR/STTR conferences, proposal development workshops, and review of the proposal draft. In addition, **SBIR/STTR Phase Zero and Double Zero grants (of up to \$4,000, each)** are available to defray costs in developing high-quality, competitive proposals. *This program is funded by the Council on Postsecondary Education (CPE), and offered by the Kentucky Science and Engineering Foundation at KSTC.*

To apply for funding:

*For the Kentucky SBIR/STTR Matching Program
Visit <http://www.kstc.com> (Tel: 859-255-3613 ext. 252)
For SBIR/STTR Phase Zero and Double Zero Grants
Visit <http://ksef.kstc.com> (Tel: 859-255-3613 ext. 251)*

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Members as of June 24, 2007

KSTC OVERVIEW OF INVESTMENTS BY CPE/KBE FUNDS: FY02-FY07

CPE/KBE FUND	Actual / Approved Investments (#)									Actual / Approved Investments of State KDE Funds (\$)									Cumulative Grand Totals Including Withdrawals	
	FY02	FY03	FY04	FY05	FY06	FY02-FY06 SUBTOTALS	FY07 (#) see note	FY02-FY06 Withdrawals*	FY07 (#) Withdrawals*	FY02	FY03	FY04	FY05	FY06	FY02-FY06 SUBTOTALS	FY07 (\$) see note	FY02-FY06 Withdrawals*	FY07 (\$) Withdrawals*	FY02-FY07	
Kentucky Enterprise Fund (KEF)																				
Rural Innovation - 1	9	23	45	11	70	158	13	29	1	539,000	172,500	610,359	193,255	1,549,680	3,064,794	317,500	324,300	25,000	3,731,594	
Rural Innovation - 2	4	6	4	-	2	16	2	8	3	89,200	154,846	192,500	-	128,250	564,796	200,000	503,750	300,000	1,568,546	
R&D Voucher	6	5	15	3	7	36	4	8	1	599,732	600,000	2,300,000	600,000	1,400,000	5,499,732	800,000	1,000,000	200,000	7,499,732	
Early Concept Pool	-	4	4	4	20	32	30	3	2	-	100,000	100,000	100,000	550,000	850,000	750,000	75,000	50,000	1,725,000	
GAP Fund	-	-	-	-	1	1	5	0	0	-	-	-	-	400,000	400,000	1,925,000	0	-	2,325,000	
KEF Annual Subtotals	19	38	68	18	100	243	54	48	7	1,227,932	1,027,346	3,202,859	893,255	4,027,930	10,379,322	3,992,500	1,903,050	575,000	16,849,872	
KEF Subtotal (Excluding Withdrawals)	297									14,371,822										
Kentucky Commercialization Fund (KCF)																				
Commercialization Func	7	2	8	6	7	30	14	0	0	477,553	149,999	459,137	449,976	450,000	1,986,665	1,457,527	0	0	3,444,192	
Com Fund Subtotal (Excluding Withdrawals)	44									3,444,192										
Kentucky Science & Engineering Foundation (KSEF)																				
R&D Excellence	31	43	40	33	31	178	16	3		2,086,617	2,166,015	1,872,765	1,701,155	1,817,204	9,643,756	1,426,552	31,500	-	11,101,808	
Phase 0/Phase 00	-	10	13	13	18	54	16		0	-	37,850	38,037	39,779	61,045	176,711	53,450	-	-	230,161	
KSEF Annual Subtotals	31	53	53	46	49	232	32	3	0	2,086,617	2,203,865	1,910,802	1,740,934	1,878,249	9,820,467	1,480,002	31,500	-	11,331,969	
KSEF Subtotal ** (Excluding Withdrawals)	264									11,300,469										
Kentucky EPSCoR																				
EPSCoR	24	39	50	69	85	267	67	0	0	2,342,600	2,631,000	2,302,600	2,211,900	2,211,025	11,699,125	2,211,025	0	0	13,910,150	
EPSCoR Subtotal ***	334									13,910,150										\$ 13,910,150
CUMULATIVE GRAND TOTOALS																				
Annual Grand Totals	81	132	179	139	241	772	167	51	7	\$ 6,134,702	\$ 6,012,210	\$ 7,875,398	\$ 5,296,065	\$ 8,567,204	\$ 33,885,579	\$ 9,141,054	\$ 1,934,550	\$ 575,000	\$ 45,536,183	
FY02-FY07 GRAND TOTAL (Excluding Withdrawals)	939									43,026,633										

* These awards were approved by KSTC but later withdrawn by the applicant and are presented here for overall context on the volume of activity managed by KSTC.

** This amount exceeds the contract amount for program awards due to a limited amount being supported partially from the KSEF administration budget.

*** Revised EPSCoR data are reported using the new KERS database. These figures do not include an estimated 16 awards under EPSCoR in the amount of \$2,429,600 for FY01; all other KBE awards began in FY02.

NOTE: FINAL CUMULATIVE SUBTOTALS AND GRAND TOTALS IN THE RELEVANT CELLS ABOVE EXCLUDE WITHDRAWALSAnnual KSTC Report to Council on Postsecondary Education:
FY07 ATTACHMENT

Relevant Meeting Minutes and Notes

KSTC Board of Directors Meeting Dates

May 19, 2006
December 12, 2006
May 30, 2007 (Minutes pending review and approval)

KSTC Executive Committee Meeting Dates

June 27, 2006
August 16, 2006
October 2, 2006
November 6, 2006
December 12, 2006
March 16, 2007 (Minutes pending review and approval)

KSEF Advisory Board Meeting Dates

December 8, 2006 (Mahendra drafting)

EPSCoR Statewide Committee Meeting Dates

October 9, 2006
October 30, 2006
February 14, 2007

May 19, 2006 / KSTC Board of Directors / Meeting Minutes

The Chair then asked Joanne Lang to review for the Committee the proposed update to KSTC's records retention policy specifically related to KBE documents, which are growing exponentially each year. Ms. Lang took the Committee through the proposed update provisions (see attached) of the policy and answered questions. With no major issues noted and upon a proper motion and second the records retention schedule - policy update was adopted.

Next the Committee was presented with two resolutions in support of the pending KSTC proposals about to be submitted to the Council on Postsecondary Education (CPE) in response to two Solicitations to administer KBE programs; one including Rural Innovation Fund, R&D Voucher Fund, ICC Concept Pool and Commercialization Fund; and one including Kentucky EPSCoR. As required by the CPE Solicitations to administer these KBE programs, the resolutions presented written agreement to honor existing commitments made under its current contract in operation for FY05/06 with CPE. The resolutions were amended to respond directly to the Solicitations and to also add Kentucky Science & Engineering Fund (KSEF); upon a proper motion and second passed two resolutions.

Kris Kimel then asked Kentucky Enterprise Fund (KEF) staff to present four projects recommended for funding (Commercialization Fund (1), ICC Concept Pool (2), and R&D Voucher (1).) Staff then reviewed each project for the Committee detailing content, purpose, and due diligence results. With no significant issues or objections noted and upon a proper motion and second the projects were approved.

Next the Committee took up the staff recommendation for funding of the first Gap Fund project since approval was received by CPE. Matt McGarvey reviewed for the Committee the history, purpose and policies of the Gap Fund. He then answered questions about its use and application for the Committee as well as the approval from CPE for authorizing its addition to the Kentucky Enterprise Fund.

Matt then took the Committee through the first company presented for funding through this "program". Mr. McGarvey detailed the specifics of the company, the due diligence findings, and proposed investment of \$400,000 (see attached). With no major issues or objections noted and upon a proper motion and second the project was approved.

Last on the agenda was a proposal from KSEF to join the ownership group for KentuckySat (KySat) at \$35,000. The Committee discussed the broad-based purposes of KySat and concluded that the project was consistent with the purposes of KSEF. Upon a proper motion and second the action was approved.

December 12, 2006 / KSTC Board of Directors / Meeting Minutes

Mr. Kimel then explained that changes in the KSEF Advisory Board and the EPSCoR Statewide Committee needed to be ratified by the KSTC Board. Ron Geoghegan entertained for a motion to confirm the KSEF Advisory Board and the EPSCoR Statewide Committee as presented. It was so moved, seconded and approved.

The floor was then turned over to Joanne Lang, who gave a brief update on the KBE Annual Report.

The floor was then turned over to Matt McGarvey for the Kentucky Enterprise Fund. Matt introduced and credited his staff and spoke of plans for the coming year and his appreciation for the support of the Board.

Joanne Lang informed the Board that KSTC had received new year funding through an open bid process and had been awarded a two-year contract – for the first time.

Bill Yager then took the floor to brief the Board about the KEF and ICC programs and activities. There was discussion from the Board concerning the Gap Fund, how it works and its track record. Matt McGarvey briefly explained the Gap Fund and Joanne Lang explained that the Gap Fund was not new dollars, but is utilizing carryforward dollars with CPE approval.

Mr. Yager continued with his briefing with Kris Kimel adding that the increase in demand and quality of proposals had increased. There were some thoughts that the demand for this funding would decline but given the success and track record that KSTC plans to go to the Legislature for a larger portion of funding for this program. There ensued a general discussion from the floor

The floor was then turned over to Mahendra Jain for a briefing on KSEF, the Commercialization Fund and SBIR/STTR matching program. Mahendra began by acknowledging his staff, and then briefed the Board on his various programs. Kris Kimel took a moment to announce that Mahendra Jain has received the 2006 National Tibbitt's Award. Dr. Jain was selected for this national award in recognition of his outstanding work that contributed so greatly to the success of the SBIR program in Kentucky and the nation.

June 27, 2006 / KSTC Executive Committee / Meeting Minutes

A total of \$852,500 was approved for the following awards: CIF-632-ICC; CIF-633-ICC; CIF-635-ICC; CIF-638-ICC; CIF-640-ICC; CIF-641-ICC; CIF-642-ICC; CIF-643-ICC; CIF-596-RUR1; CIF-598-RUR1; CIF-599-RUR1; CIF-603-RUR1; CIF-606-RUR1; CIF-607-RUR1; CIF-608-RUR1; CIF-609-RUR1; CIF-610-RUR1; CIF-612-RUR1; CIF-615-RUR1; CIF-618-RUR1; CIF-620-RUR1; CIF-621-RUR1; CIF-622-RUR1; CIF-624-RUR1; CIF-626-RUR1; CIF-587-RUR1; CIF-630-RUR1; CIF-631-RUR1; CIF-594 -RUR2; CIF-593 -RUR2

Bill Yager then presented and reviewed the package of eight ICC Concept Pool projects totaling \$200,000 recommended for action (see attachment). Mr. Yager then discussed each project separately including all due diligence information and findings. Following a full discussion of the projects and with no issues or objections raised the package was recommended for action. Upon a proper motion and second the ICC Concept Pool projects were approved in their entirety with Ron Geoghegan abstaining from the vote on TriZenter LLC.

The Committee then entertained the Rural Innovation Fund projects recommended for action. Bill Yager and Aileen O'Leary began by reviewing the process and program objectives of the Rural Innovation Fund program. Each project was then presented separately for review and discussion. With no major issues being raised and upon a proper motion and second the entire package of 20 Rural level 1 totaling \$477,500 and two Rural Level 2 projects totaling \$175,000 were approved with Shiela Medina abstaining from the vote on Geolingua LLC.

Staff briefed the Committee members that KSTC had submitted two year bids for KBE funds, which were under review by the Council on Postsecondary Education.

August 16, 2006 / KSTC Executive Committee / Meeting Minutes

A total of \$575,000 was approved for the following awards: CIF-655-ICC; CIF-674-ICC; CIF-706-RD; CIF-708-GAP.

The Committee turned to the ICC Concept Pool projects up for action. Staff then reviewed the two projects totaling \$50,000 being recommended for approval. With no major issues and upon a proper motion and second the projects were approved.

The Committee then reviewed one \$200,000 R&D Voucher project proposed for action. After a discussion of the proposal and upon a proper motion and second the project was approved.

Matt McGarvey then put a Gap Fund proposal for \$325,000 before the Committee for action. Matt briefed the Committee in detail on the purposes of this "new" Fund including the implementation approval from CPE. The Committee then reviewed and discussed the one Gap Fund proposal up for action. A thorough discussion, including due diligence findings, of the project ensued. Upon a proper motion and second the project was approved.

Matt McGarvey then led a discussion concerning the intent and purposes of the ICC Concept Pool as it related to multiple proposals from the same company. The Committee asked staff to review this matter and return with a recommended practice and course of action.

The agenda included a discussion concerning ChipRx. Matt and Kris Kimel reviewed for the Committee the "contract" situation concerning the company and the newly formed SenseOmics. Staff relayed the specifics of the situation which involved a new company being created (SenseOmics) by ChipRx principals and then transferring IP and personnel to the new company

essentially adversely changing the original contract. KSTC has sought to communicate with ChipRx with no success since early this year. Staff are asking for authorization from the Committee to file suit (see attached) against the company if no legitimate remedy (or communication) can be reached that meets KSTC's fiduciary and management responsibilities to the Commonwealth of Kentucky. The Committee then reviewed the proposed issues and complaint with staff. After consideration of the issues and upon a proper motion and second the Committee authorized the suit.

October 2, 2006 / KSTC Executive Committee / Meeting Minutes

The Committee then turned to the review and action on two Gap Fund proposals totaling \$800,000. First staff reviewed for the Committee the provisions under which this new Fund operates. Staff then discussed in detail the due diligence for each of the two projects. After a review and discussion, with no material issues raised and upon a proper motion and second the two projects were approved,

Next staff discussed four Commercialization Fund projects totaling \$299,928 up for action. Again staff went through a detailed discussion on each of the projects including all relevant financial and due diligence information. With no major issues and upon a proper motion and second the four projects were approved.

A total of \$1,099,928 was approved for the following awards CIF-190-COM; CIF-480-RUR1; CIF-453-RUR1; CIF-474-RUR1; CIF-707-GAP; CIF-708-GAP

November 6, 2006 / KSTC Executive Committee / Meeting Minutes

First on the agenda was the review of the ICC Concept Pool projects up for proposed action. Bill Yager proceeded to take the Committee through a review of each proposal including pertinent information from the due diligence process. After a discussion of the projects and upon a proper motion and second all the proposals were approved. Shiela Medina recused herself from the vote on Tribo Flow Separations.

A total of \$375,000 was approved for the following 15 awards: CIF-654-ICC, Acumantra Solutions Inc.; CIF-655-ICC, AllTranz 2 THC; CIF-657-ICC, AllTranz 4 Microneedle; CIF-658-ICC, BoroLex; CIF-659-ICC, Cool Cover LLC; CIF-661-ICC, FirstAuto Inc.; CIF-663-ICC, ImmunoTheragnostics Incorporated; CIF-664-ICC, LDG Sleep Technologies Inc.; CIF-665-ICC, Marketplace Earth LLC; CIF-666-ICC, MetroMojo LLC; CIF-667-ICC, Ocular Transplantation LLC; CIF-669-ICC, RiskAware LLC; CIF-670-ICC, TVClipFinder.com; CIF-673-ICC, Tribo Flow Separations LLC; CIF-723-ICC, Advanced Genomic Technology.

Next the Committee entertained the package of Rural Level 1 projects. Again staff took the committee through each proposal. With no major issues arising and upon a proper motion and second the proposals were approved (see attached).

A total of \$175,000) was approved for the following 8 awards: CIF-678-RUR1, Aspen Compressor, LLC; CIF-679-RUR1, Bluegrass Logistics; CIF-680-RUR1, Capital Software, Inc.; CIF-681-RUR1, Centrant, LLC; CIF-690-RUR1, Komfort Kruz; CIF-691-RUR1, Life Gear LLC; CIF-700-RUR1, Sisters Of Invention; CIF-701-RUR1, Storm Shield, LLC.

The Rural Level 2 projects were reviewed next (4 projects for). The same process was followed with no major issues or questions being raised. Upon a proper motion and second the projects were approved (see attached)

A total of \$400,000 was approved for the following 4 awards: CIF-648-RUR2, FutureEscape, LLC; CIF-649-RUR2, Global Project Design, LLC; CIF-651-RUR2, LeanCor, LLC; CIF-653-RUR2, SkyWave, LLC.

Aileen O'Leary then reviewed the R&D Voucher proposal (see attached; one project for). Upon a thorough assessment of each project with no issues being raised and upon a proper motion and second the projects were approved.

A total of \$200,000 was approved for the following 1 award: CIF-650-RD, InnoRem, Inc.

Matt presented a staff recommendation (see below) to refine the payback protocols on Grant level awards. Staff explained the growth in these programs and in order to maintain a fair and equitable process, companies receiving more than two such grants (from any KEF program) would trigger a payback provision on all such funds to-date. Upon proper motion and second, payback protocols for Grant level awards were adopted.

Staff briefly discussed the established process for new applications with undocumented conflict of interest with existing portfolio companies. The current due diligence process allows for complete review of the appropriate fit with all relevant KEF guidelines.

The Committee then, as part of its regular review of policies, reviewed with staff the earlier discussions and legal opinions surrounding KSTC's position that it does not fall in the category of "broker dealer" as defined by law. After a discussion of this matter, including revisiting the legal opinion on this subject rendered by Stites and Harbison in 2001, the Committee reaffirmed its concurrence.

Recommendation Proposed Protocol on Applications for Technologies in Competition with Current Investments:

In the event that KSTC receives an application for funding which appears to have a similar technology to that of an existing KSTC client - those with the status "Awardee" or "Active" or a "Completed" (Completed included only if KSTC holds a position in the company) - the following guidelines shall apply:

1. KSTC will receive the application
2. KSTC will notify the applicant that we have made an award to a similar company and will release the existing KSTC client name, contact information and non-confidential executive summary to the applicant. No further information will be supplied.
3. KSTC will notify the existing KSTC client of the applicant and will release the applicant name, contact information, and non-confidential executive summary to the existing KSTC client. No further information will be supplied.
4. KSTC will require that both the applicant and the existing KSTC client confirm in writing by date certain that the other party's technology is the "same" or "different" than their own, and why.
5. If the existing client claims the technology is the "same," then the new application is rejected; if the existing client claims the technology is "different," then the new application will proceed through the due diligence process.
6. If the applicant claims that the technology is the "same," then the new application is rejected; if the applicant claims that the technology is "different," then the new application may proceed through due diligence only if the existing client agrees that the technology is "different."
7. If the date certain expires without receipt of both letters claiming that the technology is "different," then the new application is rejected.
8. If the new application is rejected and the applicant chooses to re-tool the application and submits an application in the future, then this process will be repeated.

Recommendation to Refine Payback Protocols on “Grant” Level Awards:

The Kentucky Enterprise Fund has seen extraordinary growth in the volume of applications and awards in the past 18 months, in particular the “grant” funds – the Rural Innovation Fund, Level 1, and ICC Concept Pool Fund that do not trigger payback requirements. In compliance with the intent of the KBE programs and in order to maintain a fair and equitable process for providing early stage and seed capital to Kentucky’s technology start-ups, staff proposes adding a payback provision to the grant-level awards for companies that receive more than two such “grants”. By adding this provision, KSTC can provide an incentive for the best technology start-up companies to move beyond grant-level awards to higher value awards with payback provisions and thereby provide a mechanism for renewing the Funds through exits.

Staff proposes adding the following provisions to the guidelines and contracts of the Rural Innovation Fund, Level 1, and ICC Concept Pool Fund:

Application Guidelines (ICC Concept Pool): Payback Requirement

There are no payback requirements on this one time award of \$25,000. However, the award may become subject to payback as a condition of future awards. The ICC Concept Pool Fund and Rural Innovation Fund (Level 1) are considered “grant level” funds. A company may receive a total of \$50,000 of grant level money (either two ICC awards for separate technologies, two Rural Level 1 awards for separate technologies, or one ICC award and one Rural Level 1 award for the same or a different technology) without incurring a payback requirement. If the company applies for and receives grant level funding beyond this total, KSTC will negotiate a payback provision *for the full amount of all awards made*.

Application Guidelines (Rural 1): Payback Requirement

There are no payback stipulations on this one time award of \$25,000. However, if an award is made through the Rural Innovation Fund, Level 2, which takes the total of moneys awarded through the program above \$25,000, then the entire amount, *including the amount originally granted through the Rural Innovation Fund, Level 1, award*, becomes subject to payback at 2X the amount disbursed. For example, a \$25,000 Rural Innovation Fund, Level 1, award recipient that is awarded \$75,000 through the Rural Innovation Fund, Level 2, program becomes liable for a payback of \$200,000 – 2x \$100,000.

Contract Language (ICC): Repayment Amount

The Company is not obligated to repay the ICC Funds unless (i) an Event of Default occurs, in which case the provisions of Article 8 shall apply; or (ii) if the Company or an Affiliate receives total funding of more than \$50,000 under one or both of the Rural Level 1 or ICC Concept Pool programs, then the ICC Funds disbursed under this Agreement shall be included with the other awards and subject to repayment as provided in the other funding agreements.

Contract language (Rural 1): Repayment Amount

The Company is not obligated to repay the Rural Funds unless (i) an Event of Default occurs, in which case the provisions of Article 8 shall apply; or (ii) if the Company or an Affiliate receives (A) total funding of more than \$50,000 under one or both of the Rural Level 1 or ICC Concept Pool programs or (B) funding under the Rural Level 2 program, then the Rural Funds disbursed under this Agreement shall be included with the other awards and subject to repayment as provided in the other funding agreements.

December 12, 2006 / KSTC Executive Committee / Meeting Minutes

This action was followed by the presentation of KSEF RDE-009 proposals recommended for approval, i.e., involving 16 projects totaling \$1,426,552. Mahendra Jain first reviewed for the Committee the evaluation process and protocols. He then referred the Committee to the proposal review sheet and discussed the projects, the “cutoff” point and those being recommended for approval (see attached). The Committee then proceeded with its review and discussion.

Upon a proper motion and second the recommended proposals were approved (with Shiela Medina abstaining from voting on KSEF-1068).

(In brief, 16 proposals (13 in the Emerging Ideas category and 3 in the Emerging Technologies category) from four of the five research focus areas are recommended for approval at \$1,426,552. The funding is for a period of 1 -2 years.)

March 16, 2007 / KSTC Executive Committee / Meeting

(Minutes pending review and approval)

Awards approved included: CIF-774-ICC; CIF-784-ICC; CIF-730RUR2; CIF-725-RD; CIF-794-GAP; CIF-796-GAP.

December 8, 2006 / KSEF Advisory Board / Meeting Notes

Kincaid Room (First Floor, Restaurant)
Radisson Plaza Hotel, Lexington, KY

Time: 12:00pm – 3:30pm

Lunch was served from 12:00 – 1:00pm.
Mahendra Jain called the meeting to order at 1 pm.

Those present were:

Chuck Staben	Mahendra Jain (KSTC staff)
Blaine Ferrell	Joanne Lang (KSTC staff)
Nancy Martin	John Wehrle (KSTC staff)
Paul (Korky) Korkemaz	Liz Knapp (KSTC staff)
Ed McInerney	Debbie Rempfer (KSTC staff)
James Miller	

Those joined via telephone over speaker phone:
(at 1:45pm) Charles Kupchella, Ed Givan

Agenda Items:

Mahendra thanked the following members of the KSEF advisory board who have stepped down or will be stepping down: Wendy Baldwin, Daniel Huber, Roger Dingus, and Nancy Martin (and Hein van der Steen).

1. Prior meeting minutes of October 24, 2005 – accepted without change

2. KSEF Program Update given by Mahendra Jain

(See the power point handout for program update details.)

The question was asked, “How does KY compare to other states in terms of Federal Funding awarded?” Nancy Martin shared that within the last 15 years, KY has risen in ranking from 51 (includes 50 states + Puerto Rico) to 42nd in rank.

3. Kentucky Satellite Update

- Joanne Lang shared the progress the students have made in designing and presenting their work on KYSat-1. She explained that efforts are also underway to gather the mission team for KYSat -2.
- Chuck Staben asked about the need for an export license for the students to launch the Cube Sat into space? KSTC is aware of the issue and researching the legality.

4. CED/DCI SBIR/STTR Matching Funds Program Update by Mahendra

(See the power point handout for program update details.)

5. KY Commercialization Fund Program Update by Mahendra

(See the Descriptive Program Overview Handout for details on the available funding)

6. Presentation and Discussion on the Award Recommendations for KSEF-06-RDE-009 Proposals

The information on the proposals was presented in 4 tables.

Table 1: All Proposals (141)

Table 1 listed all the proposals based on the average technical score ranked in descending order. The cut-off point was drawn at a score of 800, which resulted in 52 possible fundable proposals. Had the money been available, we would have recommended 51 of the 52 proposals for funding. Proposal KSEF-1146 was removed from consideration, because the PI passed away after submitting the proposal, leaving 51 fundable proposals with a requested budget total of \$4,637,463.

Tables 2 and 3 listed the fundable proposals into 2 categories while maintaining the descending rank order by average technical score.

Table 2: Fundable Proposals (Emerging Ideas)

The advisory board concurred with the recommendation to award the first 12 out of 36 proposals in this category; as well as proposal KSEF-1068 out of rank order for the following reasons: it was a high ranking Environmental and Energy Technology proposal, the requested budget was small, and the project addressed a global problem.

KSEF-1151 was recommended for funding with a reduced budget of \$35,000 for a period of only one year, because the PI could accomplish the first goal of the project at his university even at the reduced funding level. This will eliminate subcontracting 90% of the total requested budget to another university. Thus, the advisory board concurred with the recommendation of funding a total of 13 emerging idea proposals for a sub-total funding amount of \$1,126,903.

Table 3: Fundable Proposals (Emerging Technologies)

The advisory board concurred with the recommendation to award the first 3 out of 15 proposals in this category for a sub-total funding amount of \$299,649.

Table 4 showed a summary of the number of award recommendations and proposals submitted by research focus area and proposal category. The board concurred with the recommendation to fund 16 of the proposals (as detailed above) for a total funding amount of \$1,426,552.

Supplemental Chart by Area of Application

In an effort to assess the distribution of funding across research areas, an additional table was provided that categorized the 51 fundable projects by six areas of application which included: Energy, Environment, Human Health, Info Tech, Materials, and Plants. Within each category, proposals were ranked in descending order by average technical score. Viewing the projects by these groupings demonstrated the following distribution and success ratios:

Distribution of Award Recommendations by Area of Application

Area of Application	Fundable Projects	Current Recommendations	Success Ratio	Additional Projects for Funding	Potential New Success Ratio
Human health	23	3	1:8	10	1:2
Materials	16	9	1:2		1:2
Energy	4	1	1:4		1:4
Environment	3	1	1:3	1	1:2
Plants	3	2	1:2		1:2
Info tech	2	0	0:2		0:2
Totals:	51	16		11	

Due to an imbalance of only 1 human health project being selected for funding for every 8 fundable human health proposals submitted, a secondary recommendation was made to fund an additional 10 human health projects (along with one environmental project) if additional funds were to become available from another source. The table on the previous page demonstrates the new distribution that would result, if the secondary funding recommendation were possible.

After discussing the secondary request highlighted above and reflected in the 11 x 17 sheet at the meeting, Chuck Staben offered an alternative secondary recommendation in two parts:

Part 1:

If additional funds become available, award the following 9 projects in the following order:

Human Health: KSEF-1139, 1221, 1091, 1086, 1118, 1099 (6 projects)
 Info Tech : KSEF-1184
 Environment: KSEF-1233
 Materials: KSEF-1085

Part 2:

If additional funds are still available after awarding the 9 projects above, return to the advisory board for consultation.

The board concurred with the above recommendation which would result in the following distribution (if additional funds were to become available).

Area of Application	Fundable Projects	Current Recommendations	Success Ratio	Additional Projects for Funding	Potential New Success Ratio
Human health	23	3	1:8	6	1:4
Materials	16	9	1:2	1	1:2
Energy	4	1	1:4		1:4
Environment	3	1	1:3	1	1:2
Plants	3	2	1:2		1:2
Info tech	2	0	0:2	1	1:2
Totals:	51	16		9	

Other Business:

Mahendra thanked Liz Knapp for her work as Program Manager for KSEF over the past 4 years and explained that she will be stepping down to work part time for the KY EPSCoR Program in January 2007.

With no other business remaining, the meeting was adjourned at 3:30 pm by Mahendra Jain.

Notes prepared by: Liz Knapp

October 9, 2006 / Kentucky Statewide EPSCoR Committee / Meeting Minutes

Individuals present (21):

	Committee Members		Subcommittee Chairs & Representatives
1	Chuck Staben	1	John Connolly
2	Del Collins	2	Richard Hackney
3	Ben Malphrus	3	George Pack,
4	Bob Stout	4	Karen Hackney
5	John Mateja,	5	Jeff Mossey
6	Blaine Ferrell,	6	Jesica Creech
7	Shivendra Sahi,		
8	Eric Grulke,		Staff
9	Rob Kenton,	1	Liz Knapp
10	Nancy Martin,	2	Rick Kurzyske
11	Pamela Feldkoff, UofL guest	3	John Wehrle, KSTC
12	Wimberly Royster,	4	

The following notes are presented with reference to the Tab number from the Meeting Agenda Binder.

Tab 1: Prior Meeting Minutes

The Meeting minutes from January 11, 2006 were approved without change.

Tab 2: Overview of FY 05/06 KY EPSCoR Program Results

Rick reviewed the fiscal year budget and explained that the extra state funding requested for the RSF program did not come through due to the governor's veto of legislation.

Two copies of the EPSCoR – 2020 Workshop Report from NSF's August 2006 meeting were circulated. Anyone wanting an individual copy was invited to sign one of the two documents for a copy to be sent to them later.

Tab 3: Subcommittee Chair's Annual Report:

NSF – NSF funding is on a 3 year cycle. The next cycle is from 2008 – 2011. Proposal ideas are due Dec 18, 2006. They want to focus in on 3 or 4 areas, but this will depend on the outcome of the cost share, REG program and summer program. Jessica Creech was introduced as the new Project Coordinator for KY NSF EPSCoR. Her primary responsibility is to report on outcomes and implement diversity.

USDA – USDA has redefined what they consider infrastructure funding to more broadly attribute USDA funding to the EPSCoR program.

NASA – NASA is pleased with KY NASA EPSCoR follow-on funding achievements.

DoD – Since we did not receive any federal DEPSCoR awards last year, the DOD Subcommittee is trying this year a white paper approach in an attempt to flush out DOD concept interest and support. The deadline for full proposals is 10-19-06. From the 20 proposals received, only 5 go in. In the last round of funding 8 KY DOD EPSCoR proposals were submitted for federal funding consideration.

The EPSCoR committee is offering this year \$1,000 in travel grants for the proposal authors to visit the national lab or center related to their topic. Of the 22 white papers

received, only 3 people have been interested in the national lab visit. Rick spoke with a representative from the Oklahoma EPSCoR Program for insight into their DEPSCoR award successes. (OK has received 22 of the DEPSCoR awards over the last several years compared to 6 for KY over the same time period). The representative's advice was to find an influential person inside DOD who can champion your cause. Wimberly feels we need to be more proactive.

George Pack – His overall feeling is that all of the white paper proposers were making phone calls and making contact even if they didn't go to visit.

Eric Grulke pointed out 2 things: 1) Fed program managers are not allowed to show preference on an application 2) typically a month before the close date, program managers are not allowed to speak to applicants. Eric cautioned to say that a letter of support may not be a good indicator of success, however, Rick did speak with the DOD EPSCoR Program manager (Chris Cupp) about our white paper approach and he responded favorably.

Richard Hackney - suggests getting a letter from another laboratory PI who is interested in the project.

NIH – The Committee reviewed the list of seven currently active COBRE/BRIN awards.

Tab 4: Award Impacts from FY 06 (KERS Reporting System)

Liz presented an update on the developmental status of the KERS system, some additional computer programming needs, and a summary of the award impacts as reported by all KY EPSCoR awardees.

Some members would like to see the sources of follow-on funding, especially for the RSF awards. KY EPSCoR will seek to identify the sources in future reporting.

Wimberly – suggests that at the National Meeting we have a session on impact data collection across EPSCoR states.

Tab 5: CPE Annual Report

The last graph was missing from the report. Later in the meeting, Jeff Mossey was able to display and explain the graph that shows KY is increasing its percentage of federal funding over time. We jumped a cohort. In '85 we were at the .35 % level now (starting in 2004) we are at .7%.

Tab 6: Report from the Statewide Committee for nominations

- Renewals – Nancy Martin's replacement, Phil Schmidt, Rob Keynton, T.S. Kochhar, Shivendra Sahi
- New Nominations – Tom Otieno (rounds out all the comprehensive Universities), Edwin Tivol (replaces Judi Streepey)
- Replacement – Chuck Staben for Wendy Baldwin

Actions approved. Rick will send out letters to welcome the new members.

Tab 7: Subcommittee Membership and Nominations

Members may overlap between a Subcommittee and the Statewide Committee (example: Tom Otieno and Nancy Martin are both members of the KY EPSCoR NSF subcommittee and the Statewide Committee).

The following Subcommittee changes were approved:

- **DoD** – Member nomination: Tom Starr (Tom Starr's name was mis-spelled on the handout). Wimberly needs to resign from the Subcommittee; he feels they need to have someone who knows more about DoD.
- **DOE** – Eric Grulke will replace John Stencel as the Chair
- **NSF** – Member nominations: Tom Otieno, Miroslaw Truscynski, and Paul Perkins

No Tab: University of Louisville Bio Safety Lab Award

Nancy Martin gave an update on the Bio Safety Lab award which was made in September 2006. It is the largest award ever received by the University of Louisville. She is the PI of the NIAID award which was earned through a team effort by Del Collins, members of OVALS, and others.

One of their goals is to make sure the country has appropriate physical facilities to carry out research on biological threats. An additional focus is on emerging infectious diseases – like SARS.

It was a very complicated grant to write. They needed an architect to match the scientific plans proposed and also had to provide a threat risk analysis in order to receive the grant.

The building will be a one story facility plus a penthouse. It will have a Bio-Safety Level 3 containment system, and SOPs for working with agents and vaccinations. There will be animal (rodent) facilities in adjacent rooms, animal holding rooms and procedure rooms, and a confocal microscope. The space will be run similar to a condominium model: i.e. book the space according to how much time does it takes to run the study. Lab techs will be able to run the microscope remotely.

The projected opening date is December 2008 when the building should be finished. Plans are on schedule so far. The facility will allow KY to compete for grants that they might not have been able to previously. Total amount of the project is \$33 Million, with \$22.9 Million from NIH. (The max amount available was \$25 million.) No supplements are allowed at this time.

On Nov 6th, 2006 from 11:30 – 2:00pm there will be a meeting to talk about the building and get people informed and interested in the opportunity. Bob Stout has been helping because his department has overlapping research interests.

Lunch

Tab 8: Discussion of NSF and NASA State Matching Request

NSF – John Connolly presented a four point justification for maintaining the State cost share despite NSF eliminating the mandatory requirement. His argument included the following points for why it would be advantageous to retain the cost share?

- 1. strong commitment by the state is still required (by the solicitation)
- 2. cost matching increases the likelihood of being funded
- 3. the 2005 RII review indicated that the state matching component contributed greatly to KY's proposal being funded.
- 4. supporting the KY NSF proposal is consistent with both state and KY EPSCoR program goals.

Of the 19 RII proposals only 7 have been fully funded at the \$3Million level (KY is one of them). Only 5 of the 7 provided a 100% cost share.

John Connolly would like KY EPSCoR to continue the match support.

NASA - Richard Hackney was asked to explain the relationship between KSGC and NASA EPSCoR. He replied that the Space grant was NASA's first EPSCoR Program. EPSCoR started out providing a full match for KSGC, but the state cut back funding for research programs across the board. KSGC never recovered the match level. They currently receive about a 10% match. But the program is doing really well and they are getting up to 500K now and asked for a bigger (\$150 K) match last year. They were given \$100K.

Then EPSCoR established a separate NASA EPSCoR program. The KSGC and NASA EPSCoR programs should work in tandem. There are many intangibles: the KYSAT project is a great example of return on investment.

The KSGC needs now include: \$100 K to continue KSCG, and \$125 K to continue the BASE program.

DoD – needs 1 to 2 match for each proposal awarded. Each award will be at least \$350,000. Accordingly, we would need to match \$175K. That would be ~\$80K/proposal/year over 3 years.

DOE – there will be a new head of DOE EPSCoR so there may be some changes on the way. Matching requirements may be one of them.

Wimberly feels that asking for more money is going to be a “hard sell” (next to impossible). The consequences of increasing the cash match into DoD and DOE is that we get more grants (smaller grants) that build more infrastructure in these areas where equipment is in need.

Rob Kenton says we should focus the money on the programs that focus on building infrastructure rather than focusing on specific research projects.

Tab 9: Review of EPSCoR Budget and Infrastructure Program Solicitations

Committee moved (Chuck Staben motions and Blaine Ferrell 2nds) to continue support the three Infrastructure program RFPs currently announced on the KY EPSCoR web site.

Tab 10: National NSF EPSCoR Annual Conference – Nov 8-10, 2006 Lexington, KY. Everyone is welcome.

Item 11: Planning for the KY EPSCoR 2007 Annual Conference

This year the Conference will be in Lexington. We need a theme for the conference. No suggestions were provided. Chuck Staben volunteered to participate on a steering committee to plan the conference.

Item 12: Other Business

- Today's meeting will be Nancy Martin's last meeting. But she will stay on the NSF sub-committee.
- Idea Festival, Louisville, KY October 11-14, 2006 – everyone come.
- EPSCoR Coalition – Both Del Collins and John Mateja feel we should continue to lean on them for support.

Action Item: To re-establish the KY Statewide EPSCoR Executive committee which should be composed of 5 members (a Chairman and 4 others) and 2 alternates. Nancy Martin moved to change the bylaws to state that the VPs for research at UK and U of L should be on the Executive

committee by appointment and the other two comprehensive positions should be filled by vote. Motion approved.

Rick passed out a ballot and asked each Statewide Committee member to vote for two Comprehensive members. The top two vote getters will be selected for the executive committee. One alternate will be selected to represent UK and U of L, and one alternate will be selected to represent the comprehensives. Ballots were collected to be tallied after the meeting.

Meeting concluded: 2:30pm. The minutes are submitted by Liz Knapp

October 30, 2006 / KY EPSCoR / Conference Call Minutes

Committee Members on the call:

Phil Schmidt	Rob Keynton
John Mateja	Ben Malphrus
Nancy Martin	Rich Alloo
Chuck Staben	T.S. Kochhar
Blaine Ferrell	David White
Eric Grulke	Wimberly Royster, Chairman
Rick Kurzynske, Director	Liz Knapp, Program Manager

Primary Purpose: A discussion to determine the Committee's position on the levels of future state match to our NSF EPSCoR program.

Rick presented 3 options for how to handle the budget request to CPE given the new NSF Federal Program guidelines that no longer require a state matching component.

The options presented as a starting point for discussion were:

1. Continue to commit \$1.5 Million in cash match to the NSF EPSCoR program.
2. Provide no match
3. Provide a variable amount of match with \$1 Million in hard cash and allocate the remaining \$500 K to other KY EPSCoR programs, specifically, DOE, DOD, and the RSF Infrastructure program.

After discussion, the following motion was presented by Chuck Staben:

- The KY EPSCoR Statewide Program will provide \$1 Million per year for three years in hard cash match for the next NSF EPSCoR proposal subject to CPE funding.

The motion was second by T.S. Kochhar. Motion passed.

Secondary Purpose: Respond to the KSGC request for \$100 K in matching for their new award which designates KY as an official Space Grant State.

Chuck Staben made a motion to approve the request. John Mateja seconded the motion. The motion passed.

A request was also made to ask John Connolly give a briefing to the Committee at the next Statewide Committee meeting on their proposal status.

Call concluded around 11:30am.

Notes submitted by Liz Knapp

February 14, 2007 / Kentucky Statewide EPSCoR Committee / Meeting Minutes

Individuals present (19):

	Committee Members		Subcommittee Chairs & Representatives
1	Rich Alloo	1	John Connolly
2	Blaine Ferrell,	2	Barbara Kucera
3	Rob Kenton,	3	Jeff Mossey
4	Ben Malphrus	4	Jesica Creech
5	Nancy Martin, (guest)	5	Karen Hackney
6	Manuel Martinez	6	Richard Hackney (remote location)
7	Tom Otieno	7	George Pack
8	Wimberly Royster,		
9	Chuck Staben		Staff
		1	Rick Kurzynske
		2	Liz Knapp
		3	John Wehrle, KSTC

The following notes are presented with reference to the Tab number from the Meeting Agenda Binder.

Tab 1: Prior Meeting Minutes

The Meeting minutes from October 9, 2006 were approved without content change. A typo was corrected on page 3. The Conference Call Minutes from October 30, 2006 were approved without change. However, John Connolly noted in regard to the bullet sentence, that the length of the NSF award may be longer than three years.

Tab 2: Subcommittee Membership

Both DoD and DOE still need to set membership term rotations for their subcommittee. Karen Hackney agreed to have the NASA subcommittee's three year terms begin on January 1 which will coincide with NSF's rotational terms. John Connolly reviewed the NSF nominations of Bruce Kessler to replace Lowell Sank from WKU and Chuck Staben to replace Wendy Baldwin from UK. Both nominations were approved.

Subcommittee Chair Updates on Agency Programs

DoD – George Pack gave an update on DoD EPSCoR activities.

NSF – John Connolly gave an overview of the outcomes of the 2006 NSF EPSCoR National Conference which was held in Lexington on Nov. 7-10. Feedback was positive with a high attendance of 241 from 35 states.

NASA – Karen Hackney gave the update in place of Richard Hackney who was unable to attend. On March 30, 2007, they will know the outcome of the federal proposal submission. Karen thanked Wimberly and Rick for their help in preparing the proposal.

Rick provided a list of the President's Budget Request for FY2008 for each of the EPSCoR Federal Agencies. A table displayed previous FY budgeted versus enacted amounts. Additionally, it was noted that the administration of NSF EPSCoR has been moved to NSF's Office of Integrated Activities, effective in FY 2008.

Tab3: NSF EPSCoR 2020 Workshop Report

An overview of the 2020 EPSCoR Workshop held last year in D.C. was provided. Lee Todd participated in the workshop. The document outlined 6 strategic priorities and gave several recommended actions; several of which are being put in place now. One is that the term of the award is being extended from 3 year terms to 5 or 6 year terms. Our next NSF proposal is due in Oct 2007. By law, the RFP must come out 90 days before the deadline

Tab4: Status of the KY EPSCoR FY 06/07 Program Budget

Rick reviewed transmittals to date and the pending funds to be placed this year. As in the past, any balance of funds will be rolled over into NSF EPSCoR's match requirement.

Tab 5: Strategic Discussion: "Are we maximizing the value of the Kentucky EPSCoR Program to benefit the Commonwealth?"

From the Discussion:

- Rich Alloo queried as to how KY EPSCoR funding is spread across focus areas. Our next annual report may have a graphic illustrating funding by focus area.
- Manuel Martinez asked if we compare our outcomes measures to other EPSCoR states (benchmarking). It was explained that the availability of such comparison data is limited, but that some NSF data is used to compare our performance with other states. A graphing of KY EPSCoR performance against other EPSCoR state cohorts will be released soon.
- Wimberly says that he feels we may need to consider increasing our administration management budget at KY EPSCoR in order to maximize value.
- Chuck asks if we would be interested in paying someone externally to conduct an economic impact study. The study could offer a publishable demonstration that research grants provide jobs and jobs provide economic growth. No action taken.

Question: What do the Legislative Branches really want to see in terms of outcome?

- The State may be more likely to give money based on the creation of new jobs.
- The Government may be more likely to give money based on the research created.
- Chuck suggests showing two measures: how the pie grows and then 'other measures'
- Rich Alloo suggests organizing a committee to discuss the best metrics to use.
- Rick notes that DoD, DOE and NASA are more interested in focusing their funding toward research projects rather than the creation of infrastructure...while NSF and NIH put a big portion of their attention on infrastructure creation.

Wimberly suggested that a committee be formed to further the strategic discussion of EPSCoR and metric needs. The five approved volunteers were: Chuck Staben, Rich Alloo, Manuel Martinez., Tom Otieno, and Rick Kurzynske (Chair).

Tab 6: Conflict of Interest Policy

- We have only had a verbal conflict of interest policy.
- Currently, there are two members on the Statewide Committee who also have a proposal submitted to NSF EPSCoR.
- The original verbal policy was that no committee members should be able to participate in proposal submission. But that was before there were sub-committees.
- Manuel feels we need a written policy.
- Wimberly, Chuck, and others agree that a written policy is needed that does not prohibit application for funds and membership on a sub-committee.
- Nancy states that conflicts of interests will always exist, but must be managed rather than avoided completely.

- John Connolly feels that anybody on the sub-committee should not get direct funding from the subcommittee

Rick states that we will draft a straw statement in order to begin formulating a written policy. The COI policy will establish rules under which a person should abstain from funding deliberations and the timing of the abstention in relation to a meeting.

LUNCH

Tab 7: Status of NSF Proposal Review

John Connolly gave a powerpoint presentation of the RII proposal review process.

- On 12-8-06, KY NSF EPSCoR received 22 Idea Papers
- By 2-14-07, these papers passed through three review panels: AAAS, KY NSF EPSCoR Subcommittee and KY EPSCoR Statewide Committee. They were narrowed to 13 papers in which the PIs will be invited to submit a full proposal due on 3-30-07.
- By 6-11-07, the proposals received will be passed through mail reviews, the AAAS panel, and the KY NSF EPSCoR subcommittee again. At that point, the proposals will be narrowed to a smaller group recommended for inclusion in a single proposal to be sent to NSF.
- The NSF proposal is due on 10-5-07.

Rich Alloo moved to accept for proposal invitation, the above 13 recommended idea papers of the NSF EPSCoR subcommittee. The move was seconded. The recommendations were approved.

Rick Kurzynske stated that we will move our next Statewide EPSCoR Committee meeting from May 14, 2007 to some time after the June 11, 2007 NSF EPSCoR Subcommittee meeting so that we can be informed of the final proposal recommendations.

Tab 8: Status of NASA Proposal Review

Karen Hackney prefaced her review by explaining that when KY NASA EPSCoR builds infrastructure they don't speak of building physical infrastructure but instead, they want to connect researchers with the existing Federal infrastructure.

Karen then went through an explanation of the Phase III request for \$100,000 in funding for the KSGC. The funding was approved.

Tab 9: Planning for the KY EPSCoR Annual Conference

The following discussion was generated regarding themes and planning ideas for our next conference:

- Wimberly –suggestion to have the PI's be the primary speakers – talk about their research
- Focus on outcomes
- Jeff Mossey – The state of Collaborative Research (to be a Center or not?)
- Development of a New Strategic Plan
- Building Multi-disciplinary and Multi-institutional Collaborations
- 3 potential speaking groups: 1. national level collaborators, 2. From another state – an NIH roadmap example of someone who did well, 3. Someone internal – KY EPSCoR Awardee
- Rick -suggests as a possible theme: "Insights into science based companies". Example: Intra nasal. Or "Building science based entrepreneurial endeavors".
- Chuck - notes that the state is going to do a translational research conference in the Fall – Intranasal story might be told there. So might not be a good idea
- Chuck – EPSCoR 20/20 – have one for KY

- Wimberly – what will attract faculty
- Chuck – most interested in the collaborative successes.
- “Building Team Science”
- Breakouts on 5 Research Focus Area
- Open it to active projects as well as past projects

Rick will organize an informal steering committee.

Tab 10: Review of the 06/07 Infrastructure Seeding Awards to Date

Manuel, Chuck – move and second the approval to use NLI funds to take a Young researcher to Washington DC for the EPSCoR Coalition Meeting.

Tab 11: Nominating Subcommittee for 07/08 Statewide Committee Membership

Steve Spalding – is no longer with us.

Wimberly – nominates Bob Stout – to be on the Nominating committee with Chuck Staben and Phil Schmidt. Motion approved.

Tab 12: Upcoming Events

A decision was made to move the May 14th, 2007 Statewide EPSCoR Committee Meeting to after the AAAS meeting in June 2007.

Tab 13: Other Business

Lynn Robinson is no longer working with us.

Meeting concluded: 3:30pm. Minutes submitted by Liz Knapp